

ABSTRACT OF THE DISCLOSURE

An electromagnetic solenoid comprising a cylindrical body yoke, a front yoke arranged on one end side of the body yoke, a fixed yoke formed integrally with the front yoke,
5 a back yoke arranged on the other end side of the body yoke, a center yoke arranged at the central portion of the body yoke, a first electromagnetic coil arranged along the inner peripheral surface of the body yoke between the center yoke and the front yoke, a second electromagnetic coil arranged
10 along the inner peripheral surface of the body yoke between the center yoke and the back yoke, an operation rod arranged being inserted through the front yoke and the fixed yoke so as to move, a first moving yoke mounted on an end of the operation rod on the side of the back yoke, a second moving
15 yoke arranged on the operation rod so as to slide between the first moving yoke and the fixed yoke, and a limiting means for limiting the second moving yoke from moving toward the back yoke at an intermediate position in a range in which the first moving yoke moves.